

KIRKLAND & ELLIS LLP
David J. Zott, P.C. (*admitted pro hac vice*)
Jeffrey J. Zeiger (*admitted pro hac vice*)
300 North LaSalle Street
Chicago, Illinois 60654
Telephone: (312) 862-2000
Facsimile: (312) 862-2200

Counsel for the Anadarko Litigation Trust

UNITED STATES BANKRUPTCY COURT
SOUTHERN DISTRICT OF NEW YORK

In re)	
)	Chapter 11
TRONOX INCORPORATED, <i>et al.</i> ,)	Case No. 09-10156 (ALG)
)	Jointly Administered
Reorganized Debtors.)	
)	
)	
TRONOX INCORPORATED,)	
TRONOX WORLDWIDE LLC)	
f/k/a Kerr-McGee Chemical Worldwide LLC,)	
and TRONOX LLC f/k/a Kerr-McGee)	
Chemical LLC, ¹)	
)	
Plaintiffs,)	
)	
v.)	Adversary Proceeding No. 09-01198 (ALG)
)	
ANADARKO PETROLEUM)	
CORPORATION <i>et al.</i> ,)	
)	
Defendants.)	

¹ Pursuant to the Anadarko Litigation Trust Agreement, which was approved by the Court on February 14, 2011 (Dkt. No. 2812), the Anadarko Litigation Trust was appointed as the representative of each of the Plaintiff Debtors' estates, as that term is used in section 1123(b)(3)(B) of the Bankruptcy Code, with the power and right to prosecute this matter. By the same agreement and Order, the Anadarko Litigation Trust was "deemed substituted" for the Debtor Plaintiffs in this matter "as the party in such litigation."

THE UNITED STATES OF AMERICA,

Plaintiff-Intervenor,

v.

TRONOX, INC.,
TRONOX WORLDWIDE LLC,
TRONOX LLC,
KERR-MCGEE CORPORATION, and
ANADARKO PETROLEUM
CORPORATION,

Defendants.

**PLAINTIFF'S OPPOSITION TO DEFENDANTS' MOTION TO EXCLUDE
THE TESTIMONY OF DR. NEIL RAM UNDER FEDERAL RULE OF EVIDENCE
702, MOTION *IN LIMINE*, AND MOTION FOR RELIEF UNDER FRCP 36(a)(6)**

TABLE OF CONTENTS

	Page
INTRODUCTION	1
I. Dr. Ram’s Exhaustive Analysis Is Reliable And Sound, And Easily Meets The Standards for Admissibility Under Federal Rule of Evidence 702.....	1
A. As Defendants Concede, <i>Daubert</i> Motions Are Disfavored In Bench Trials.	4
B. Dr. Ram Correctly Applied The Known Or Knowable Standard.	6
C. Most Likely Value Is The Preferred Method In This Case.....	15
II. Defendants’ Request That Plaintiffs Be Precluded From Referring To The Total Number Of Environmental Sites Dumped On Tronox Is Baseless.....	20
CONCLUSION.....	24

TABLE OF AUTHORITIES

	Page
Cases	
<i>American Home Assurance Co. v. Masters' Ship Managment. S.A.</i> , 2005 WL 159592 (S.D.N.Y. Jan. 25, 2005).....	5
<i>Amorgianos v. National R.R. Passenger Corp.</i> , 303 F.3d 256 (2d Cir. 2002).....	2
<i>Boyce v. Soundview Tech. Group, Inc.</i> , 464 F.3d 376 (2d Cir. 2006).....	7, 8
<i>Deutsch v. Novartis Pharmaceuticals Corp.</i> , 768 F. Supp. 2d 420- (E.D.N.Y. 2011)	2
<i>Diederich v. Department of the Army</i> , 132 F.R.D. 614 (S.D.N.Y. 1990).....	23
<i>First National Bank of Kenosha v. United States</i> , 763 F.2d 891 (7th Cir. 1985).....	8, 14
<i>Fleischman v. Albany Medical Center</i> , 728 F. Supp. 2d 130 (N.D.N.Y. 2010)	15
<i>General Electric v. Joiner</i> , 522 U.S. 136 (1997)	10
<i>Grand River Enters. Six Nations, Ltd. v. King</i> , 783 F. Supp. 2d 516 (S.D.N.Y. 2011).....	2
<i>In re Chateaugay Corp.</i> , 944 F.2d 997 (2d Cir. 1991).....	7
<i>In re Chemical Separations Corp.</i> , 38 B.R. 890 (Bankr. E.D. Tenn. 1984).....	6
<i>In re Commercial Financial Services, Inc.</i> , 350 B.R. 520 (Bankr. N.D. Okla. 2005).....	8, 12
<i>In re Mama D'Angelo, Inc.</i> , 55 F.3d 552 (10th Cir. 1995).....	6
<i>In re Med Diversified, Inc.</i> , 334 B.R. 89 (Bankr. E.D.N.Y. 2005)	9, 19
<i>In re R.M.L., Inc.</i> , 187 B.R. 455 (Bankr. M.D. Pa. 1995).....	6, 12
<i>In re Salem</i> , 465 F.3d 767 (7th Cir. 2006).....	4
<i>In re Sunset Sales, Inc.</i> , 220 B.R. 1005 (10th Cir. B.A.P. 1998).....	6

<i>In re W.R. Grace</i> , 281 B.R. 852 (Bankr. D. Del. 2002)	7, 12, 13
<i>Joseph S. v. Hogan</i> , 2011 WL 2848330 (E.D.N.Y. July 15, 2011)	5
<i>Lippe v. Bairnco Corp.</i> , 288 B.R. 678 (S.D.N.Y. 2003)	19
<i>Nimely v. City of New York</i> , 414 F.3d 381 (2d Cir. 2005)	2
<i>Sahu v. Union Carbide Corp.</i> , 262 F.R.D. 308 (S.D.N.Y. 2009)	23
<i>State of New York v. Solvent Chem. Co.</i> , 2006 WL 2640647 (W.D.N.Y. Sept. 14, 2006)	4
<i>Uranium Mines Dot Navajo Land, Neglected & Still Perilous</i> , <i>The New York Times</i> (March 31, 2012)	19
<i>Wiwa v. Dutch Petroleum Co.</i> , 2009 WL 1457142 (S.D.N.Y. 2009)	23
Other Authorities	
ASTM E 2137-01	15
ASTM E 2137-01 § 5.2	16
ASTM E 2137-01 § 5.2.2	16, 17
ASTM E 2137-01 § 5.2.3	16
ASTM E 2137-01 § 5.4.1.2	18
ASTM E 2137-01 § 5.4.1.3	16
ASTM E 2137-01 § 5.4.2	15, 16
ASTM E 2137-01 § 5.4.3	16
Rules	
Federal Rule of Civil Procedure 26(b)(2)(C)(iii)	23
Federal Rule of Civil Procedure 36(a)(6)	22
Federal Rule of Evidence 702	2, 5, 9
Codes	
Bankruptcy Code § 544	7

INTRODUCTION

In a final attempt to derail trial, Defendants have filed two motions that seek to preclude Plaintiff from presenting evidence on the more than 2,700 environmental sites for which Tronox became responsible upon its separation from Kerr-McGee. Defendants' *Daubert* motion seeks to exclude as unreliable the testimony of Dr. Neil Ram, a preeminent environmental engineer, who has estimated environmental costs at 372 Kerr-McGee sites based on an exhaustive analysis. Defendants' motion *in limine* seeks to bar any reference to the approximately 2,400 other sites for which Tronox also became responsible. Thus, together the motions seek to bar any expert testimony or argument about the scope and magnitude of the environmental liabilities dumped on Tronox, even though the central objective of Defendants' fraudulent scheme was to escape these liabilities, and it is these liabilities that rendered Tronox insolvent and landed it on this Court's docket.

While it undoubtedly would be convenient for Defendants if all of this testimony was excluded, there is no basis for doing so. In bench trials like this, *Daubert* motions are disfavored. Regardless, Dr. Ram is eminently qualified and his analysis reliable, sound and compelling. Indeed, Dr. Ram's analysis and opinions are far more reliable than the slipshod opinions offered by Defendants. Nor is there any basis to rewrite history by pretending that Tronox was not also saddled with potential liabilities at 2,400 other sites in addition to the 372 sites to which Dr. Ram assigned costs. Defendants' motions border on frivolous. They should be summarily denied.

I. Dr. Ram's Exhaustive Analysis Is Reliable And Sound, And Easily Meets The Standards for Admissibility Under Federal Rule of Evidence 702.

Federal Rule of Evidence 702 "embodies a liberal standard of admissibility for expert opinions." *Grand River Enters. Six Nations, Ltd. v. King*, 783 F. Supp. 2d 516, 526 (S.D.N.Y.

2011) (quoting *Nimely v. City of New York*, 414 F.3d 381, 395 (2d Cir. 2005)). Accordingly, under *Daubert*, “the rejection of expert testimony is the exception rather than the rule.” Fed. R. Evid. 702 Advisory Committee Notes (2000). Of course, “[a] minor flaw in an expert’s reasoning or a slight modification of an otherwise reliable method will not render an expert’s opinion per se inadmissible.” *Deutsch v. Novartis Pharmaceuticals Corp.*, 768 F. Supp. 2d 420, 426 (E.D.N.Y. 2011) (citing *Amorgianos v. Nat’l R.R. Passenger Corp.*, 303 F.3d 256, 267 (2d Cir. 2002)). As *Daubert* itself recognized, “[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.” *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 596 (1993).

Here, Defendants do not challenge Dr. Ram’s qualifications or expertise under *Daubert*. Nor could they. Dr. Ram is eminently qualified to render the opinions he has reached in this case. After earning a Ph.D in Environmental Engineering from Harvard University in 1979, Dr. Ram has spent the majority of his career in the field—not a courtroom—performing environmental assessment and site remediation work, including managing approximately a dozen Superfund sites, overseeing the assessment and cleanup of sites as the Licensed Site Professional of Record under the Massachusetts Contingency Plan, and acting as the project director for numerous industrial sites.² (Ex. 2, 6/24/2011, Ram Rpt. App. A-2, CV; *id.* Ch. 1; Ex. 3, 2/8/2012, Ram Tr. at 19)³

² In contrast, Defendants’ environmental expert, Dr. Neil Shifrin, rarely gets his hands dirty. His practice is consulting-based—not field work. (Ex. 1, 2/16/2012, Shifrin Tr. at 59) His company, Gnarus, provides environmental and economic analyses. Gnarus does not remediate environmental sites, perform site investigations, decontaminate facilities or equipment, oversee remediation construction projects in the field, or operate and maintain remedial systems. (*Id.* at 53-54) Although he is a Licensed Site Professional in Massachusetts, he previously allowed his license to lapse because he has “a lot of trouble finding the time to take the continuing ed courses.” (*Id.* at 62-63)

³ Excerpts of documents and testimony cited herein are included in the Declaration of Jeffrey J. Zeiger.

Dr. Ram's opinions in this case are firmly grounded in thousands of site-specific project documents as well as detailed technical environmental analyses. Dr. Ram and his team have spent approximately 38,000 hours analyzing hundreds of environmental sites that a Kerr-McGee entity formerly owned, operated, used for waste disposal, or where it was a corporate successor to such an entity. Dr. Ram personally has spent more than 2,100 hours on the project, including more than 100 hours visiting the sites at issue in this case. (Ex. 3, 2/8/2012, Ram Tr. at 95) He has personally inspected 47 environmental sites, including all sites where he assigned costs in excess of \$26 million.⁴ (Ex. 4, 12/17/2012, Ram Rbtl. Rpt. at 3-9) Dr. Ram reviewed thousands of documents and consulted with numerous former Tronox project managers who oversaw remediation at the sites. (Ex. 3, 2/8/2012, Ram Tr. at 44, 81, 99-101, 185-86) Based on this massive amount of work, Dr. Ram concluded that the estimated present value cost as of November 2005, based on information that was known or knowable as of that date, for environmental response actions remaining at 372 Kerr-McGee sites was approximately \$1.5 billion to \$1.7 billion. (Ex. 2, 6/24/2011, Ram Rpt. Executive Summary ("ES") at 1) The bases for his opinions are well-documented and set forth in a 2,034-page Report, a 482-page Rebuttal Report, and hundreds of pages of tables that he submitted with these reports.

Not surprisingly, there is no basis to exclude Dr. Ram's testimony in this case. It is not even a close call. As numerous cases make clear, the relief Defendants seek would be extraordinary in a bench trial. Moreover, Defendants' entire motion is based on a flawed legal

⁴ Highlighting the difference in approach and level of rigor underlying their opinions, Defendants' experts spent a total of 7 hours and 35 minutes in fly-by visits of eight sites, barely touching the ground before their private jet took off for the next site. (Ex. 4, 12/17/2011, Ram Rbtl. Rpt. at 4-5; Ex. 1, 2/16/2012, Shifrin Tr. at 162-65) Their feet never even touched the ground on their visit to the abandoned uranium mines in the Lukachukai Mountains on the Navajo Nation, preferring to view the site from a helicopter instead. (Ex. 1, 2/16/2012, Shifrin Tr. at 122) The Lukachukai site, which includes 41 former Kerr-McGee abandoned uranium mines and a transfer station, represents the third highest cost differential between the parties' respective experts—their estimates are more than \$125 million apart.

premise—that there is a strict prohibition against considering any information from after the transfer date in a solvency analysis. Defendants are wrong on the facts too. Indeed, Defendants’ own expert analysis puts the lie to their attacks on Dr. Ram’s methodology and approach. With respect to the 70 sites for which Kerr-McGee had reserves at the time of Tronox’s separation, Dr. Ram’s low end estimate of approximately \$730 million is within \$123 million of Defendants’ estimate of approximately \$607 million.⁵ If Dr. Ram’s analysis were as flawed as Defendants contend, it is highly unlikely that his estimate for these 70 sites would be within approximately 20% of Defendants’ estimate. As discussed below, Dr. Ram’s and Defendants’ experts’ estimates for the sites that Defendants claim were most infected by hindsight bias are nearly identical. For these and other reasons set forth below, Defendants’ motion should be denied.

A. As Defendants Concede, *Daubert* Motions Are Disfavored In Bench Trials.

Defendants’ motion suffers from a threshold infirmity: this is a bench trial. “The primary purpose of the holdings in *Daubert* and *Kumho Tire* ‘is to protect juries from being bamboozled by technical evidence of dubious merit.’” *State of New York v. Solvent Chem. Co.*, 2006 WL 2640647, at *1 (W.D.N.Y. Sept. 14, 2006). Obviously, juror confusion is not an issue in bench trials. Accordingly, courts routinely deny motions to exclude expert testimony from bench trials, allowing the trial court to assess the witness’s qualifications and reliability at trial. *See, e.g., In re Salem*, 465 F.3d 767, 777 (7th Cir. 2006) (affirming bankruptcy court’s decision to allow expert to testify over *Daubert* objection in bench trial because “where the factfinder and the gatekeeper are the same, the court does not err in admitting the evidence subject to the ability

⁵ Adjustments are necessary for comparative purposes because Plaintiff’s and Defendants’ environmental experts did not use the same discount rate and Defendants’ expert included numerous offsets that Plaintiff’s solvency expert, Professor Grant Newton, believed were better classified as contingent assets. The comparisons in this brief are based on Plaintiff’s discount rate of 2.5% (instead of Defendants’ 5% discount rate) and exclude offsets from reimbursement under the Master Separation Agreement, insurance policies, and a \$20.5 million payment from a 2006 settlement. Defendants include all of these items as deductions in their environmental cost estimates while Plaintiff includes them as contingent assets in its solvency analysis.

later to exclude it or disregard it if it turns out not to meet the standard of reliability established by Rule 702”); *State of New York*, 2006 WL 2640647, at *2 (denying motion to exclude because “proper approach” was to “permit [the expert witness] to testify at trial, subject to opportunity for cross examination probing” his qualifications and the bases of his opinions); *Am. Home Assurance Co. v. Masters’ Ship Mgmt. S.A.*, 2005 WL 159592, at *1 (S.D.N.Y. Jan. 25, 2005) (denying motion to exclude at bench trial where “there [was] no concern with protecting a jury from ‘being bamboozled by technical evidence of dubious merit’”); *Joseph S. v. Hogan*, 2011 WL 2848330, at *2 (E.D.N.Y. July 15, 2011) (holding that, unless it amounts to “pure speculation,” “expert testimony [in a bench trial] should be admitted so that the Court could have the benefit of live testimony and cross-examination to determine how much weight, if any, to give the expert’s conclusions.”).

Defendants concede that pretrial resolution of Rule 702 objections is “generally less efficient than simply hearing the evidence” in a bench trial (Mot. at 4 (quoting *Victoria’s Secret Stores Brand Mgmt., Inc. v. Sexy Hair Concepts, LLC*, 2009 WL 959775, at *6 n.3 (S.D.N.Y. Apr. 8, 2009))), yet claim that pretrial resolution of their motion will be “more efficient” in this case because excluding Dr. Ram’s testimony would “greatly simplify” a “complex” trial. As an initial matter, Defendants’ proposed exception to the denial of pretrial Rule 702 motions in bench trials would swallow the rule: exclusion of testimony will always “simplify” trial. In any event, as recognized by the case law, the efficient course in this case is to deny Defendants’ motion, thereby sparing the Court and the parties the time and expense of litigating and adjudicating Defendants’ motion on the eve of trial—including through a potential evidentiary

hearing.⁶ Defendants will have a full opportunity to challenge the reliability of Dr. Ram's opinions when and where they should: on cross-examination at trial. The Court can then determine whether Dr. Ram's opinions satisfy Rule 702. For this reason alone, the Court should deny Defendants' motion to exclude Dr. Ram's testimony.

B. Dr. Ram Correctly Applied The Known Or Knowable Standard.

Defendants' motion is based on another flawed premise: that it is never appropriate to consider information from after the valuation date. The law, however, does not draw such a bright line. When undertaking a solvency analysis, courts "may consider information originating subsequent to the transfer date if it tends to shed light on a fair and accurate assessment of the asset or liability as of the pertinent date." *In re Mama D'Angelo, Inc.*, 55 F.3d 552, 556 (10th Cir. 1995) (holding that debtor was insolvent based on the post-transfer discovery of circumstances that existed at the time of the transfer) (citing *In re Chemical Separations Corp.*, 38 B.R. 890, 895-96 (Bankr. E.D. Tenn. 1984)); *see also In re Sunset Sales, Inc.*, 220 B.R. 1005, 1016-17 (10th Cir. B.A.P. 1998) (holding that debtor was insolvent based on information including the post-transfer sale price of the debtor's business and the debtor's failure to subsequently collect accounts receivable); *In re R.M.L., Inc.*, 187 B.R. 455, 463-64 (Bankr. M.D. Pa. 1995) (considering post-transfer collapse of financing transaction and the fact that the debtor's "actual rate of realization on [its] assets [we]re dwarfed by its liabilities" in finding insolvency), *aff'd*, 92 F.3d 139, 155 n.7 (3d Cir. 1996) (affirming bankruptcy court's reliance on the post-transfer rate of realization on the debtor's assets to "buttress" the "already-sufficient evidence as to [the debtor's] then-present value"); *In re W.R. Grace*, 281 B.R. 852, 869 (Bankr.

⁶ While Plaintiff believes an evidentiary hearing is unnecessary given the arguments set forth herein and the fact that Dr. Ram will testify very soon at trial, Plaintiff will make Dr. Ram available for an evidentiary hearing if the Court prefers to determine these issues now and has questions regarding Dr. Ram's testimony.

D. Del. 2002) (“courts may consider information originating subsequent to the transfer date if it tends to shed light on a fair and accurate assessment of the asset or liability as of the pertinent date”).

Some courts go further, especially with respect to valuing contingent liabilities for solvency purposes. *W.R. Grace* recognized that there should be no limitation on the information that a party can rely on in analyzing liabilities under a balance sheet solvency test. 281 B.R. at 856. In *W.R. Grace*, asbestos claimants brought a fraudulent conveyance action under § 544 of the Bankruptcy Code and argued that W.R. Grace was insolvent under the balance sheet solvency test. The court found that, for purposes of the balance sheet test, insolvency is determined by the actual liabilities of the debtor and that “[w]hat the debtor may have known about those liabilities on the transfer date, reasonably or otherwise, is not at issue.” 281 B.R. at 856. Further, the court concluded that holding W.R. Grace responsible for its actual liabilities as of the transfer date—regardless of its knowledge of the scope of those liabilities and even if its creditors did not know of the claims as of that date—was fair because “it is not too much to expect that firms with well-established legacies of mass-tort liability should realize that transfers for less than equivalent value may harm their tort claimant-creditors should prognostications of future claims be inaccurate.”⁷ *Id.* at 868.

In asserting that “courts typically bar all information from after the valuation date” (Mot. at 5), Defendants ignore these cases and instead rely on valuation cases outside the context of solvency determinations. *See Boyce v. Soundview Tech. Group, Inc.*, 464 F.3d 376, 384-86 (2d Cir. 2006) (addressing valuation for purposes of damages for breach of contract); *First Nat’l*

⁷ The Second Circuit has taken a similarly expansive view with respect to environmental claims. *See, e.g., In re Chateaugay Corp.*, 944 F.2d 997, 999 (2d Cir. 1991) (affirming district court’s holding that CERCLA response costs are pre-petition “claims,” dischargeable in bankruptcy, regardless of when such costs are incurred as long as they concern a pre-petition release or threatened release).

Bank of Kenosha v. United States, 763 F.2d 891, 893-94 (7th Cir. 1985) (addressing valuation of property for purposes of estate taxes under the Internal Revenue Code). Nevertheless, as Defendants concede, their cases also recognize that it can be appropriate to consider information from after the pertinent valuation date. (Mot. at 5) In *Boyce*, the Second Circuit vacated the district court's judgment because it erred in applying a "bright-line rule" and excluding post-breach-of-contract valuation evidence. 464 F.3d at 386, 392. Similarly, in *First National Bank of Kenosha*, the Seventh Circuit recognized that the "rule against admission of post-valuation date events" does not apply to post-valuation date information that is relevant to valuation, and affirmed the district court's reliance on an option-to-buy contract entered into after the valuation date.⁸ 763 F.2d at 894-95. Another of Defendants' cases recognizes that "actual post-transfer events may confirm a value that was determined by information known or knowable at the time of the transfer." *In re Commercial Fin. Servs., Inc.*, 350 B.R. 520, 542 (Bankr. N.D. Okla. 2005). Because Defendants' entire motion is built on a flawed legal theory that even their own cases do not support, their motion should be denied.

Although there is no limitation on information that can be used to determine liabilities for a balance sheet solvency test, Dr. Ram took a conservative approach by relying on information that was "known or knowable" as of the November 2005 Tronox IPO in developing his cost estimates. Defendants do not dispute that Dr. Ram applied the "known or knowable" standard. Instead, they claim that his application of this standard was not pristine. At most, these are

⁸ In an apparent attempt to excuse hundreds of cites in their own expert's report to post-IPO documents, Defendants concoct a rule that courts can only consider information from "some short period of time" after the valuation date, whereas information from "long after the valuation date, by contrast, is irrelevant hindsight." (Mot. at 5) To the contrary, Defendants' cases do not impose a time limitation on information that can be relied upon to determine value. Indeed, *First National Bank of Kenosha* held that the touchstone in applying the "rule against admission of subsequent events" is the relevance of the post-valuation information, and recognized that courts can consider actual sale prices from sales that occurred within a "reasonable time after" the valuation date. 763 F.2d at 894.

points to develop on cross examination (albeit weak ones) and do not provide a basis to exclude his testimony. In any event, Defendants are wrong. Dr. Ram correctly applied the “known and knowable” standard. As Defendants acknowledge, Dr. Ram had a simple rule: any number relied upon in a cost estimate must be based on information that was “known or knowable” as of November 2005. (Mot. at 8) As Dr. Ram’s detailed site analyses for each of the 372 sites for which he assigns costs in his expert report make clear, and as he will explain at trial, this rule was followed with respect to 370 out of 372 sites.⁹

Although Defendants seek to exclude all of Dr. Ram’s testimony, they do not identify a single specific site where they contend that his purportedly improper reliance on post-IPO information materially impacted his cost estimate for that site. Instead, they argue that his entire analysis is somehow tainted by hindsight because Dr. Ram in a separate assignment also analyzed certain of the sites based on information available as of early 2009.¹⁰ (Mot. at 6-7)

⁹ Dr. Ram acknowledges that he relied on information that was not known or knowable at the time of the IPO for cost estimates with respect to *two* of the 372 sites. In addition, he used post-IPO information related to a non-Tronox site to develop a cost estimate for a Tronox site. These few instances did not materially impact his analysis and, in the aggregate, *decreased* his total cost estimate for the portfolio. (See, e.g., Ex. 4, Ram Rbtl. Rpt. at 67 (reliance on September 2006 document that showed Tronox was one of *seven PRPs* for Brine Services waste disposal site increased cost estimate by \$61,000 (at the low end of Dr. Ram’s range) to \$445,000 (at the high end of Dr. Ram’s range) compared to estimate based on pre-IPO information, which indicated Tronox was one of *eleven PRPs*); see also Ex. 3, 2/8/2012, Ram Tr. at 171-73 (referencing second instance where Hattiesburg estimate included \$215,000 to \$278,000 based on 2008 estimate for length of trough that was not available at time of IPO); Ex. 4, 12/17/2011, Ram Rbtl. Rpt. at 69 (reliance on post-IPO cost of \$64 million from non-Tronox site as metric for Tronox site materially *decreased* cost estimate compared to metric of \$190 million based on pre-IPO information))

¹⁰ Defendants incorrectly assert that the Court may not rely on Dr. Ram’s testimony in determining that “his judgments were not affected by post-IPO information.” (Mot. at 10) To the contrary, nothing in the rules or the case law prohibits the Court from relying on Dr. Ram’s testimony in making a factual determination as to the methodology he used in reaching his opinions. Nor would such a prohibition make sense. In support of their assertion, Defendants cite an inapposite snippet from the Rule 702 Advisory Committee Notes that “the trial court’s gatekeeping function requires more than simply ‘taking the expert’s word for it.’” Fed. R. Civ. P. 702 Advisory Committee Notes. In context, the Note stands for the unremarkable proposition that an expert witness relying solely or primarily on experience must explain how his experience supports his opinion. Defendants, however, do not argue that Dr. Ram relies solely or primarily on his experience or that he has failed to explain how his experience supports his opinions. Indeed, the detailed bases of Dr. Ram’s opinions, including thousands of documents concerning pre-IPO information, are set out in Dr. Ram’s expert reports. Defendants also erroneously suggest that Dr. Ram’s testimony as to the methodology he used is impermissible “*ipse dixit*.” (Mot. at 10 (citing *In re Med Diversified, Inc.*, 334 B.R. 89 (Bankr. E.D.N.Y. 2005))) “*Ipse dixit*,” however,

When Dr. Ram was retained by Tronox shortly after it filed for chapter 11, Tronox's new CEO, Dennis Wanlass, was not comfortable signing Tronox's 2008 10-K because of statements from senior officers that Tronox's contingent liability reserves were understated. (*See, e.g.*, Ex. 5, 8/11/2010, Wanlass Tr. at 81-82 (Tronox VP of Environmental Pat Corbett told Wanlass that he was not allowed to make changes to reserves "because that would have an impact on EBITDA" and he "would have done things differently had he had the wherewithal and the flexibility to do so"); *id.* at 89-90 (Tronox COO Bobby Brown told Wanlass that "he didn't think [the reserves] were sufficient"); Ex. 6, 5/11/2011, Brown Tr. at 292-93 (confirming that he told Wanlass in 2008 that "it seemed to me that the reserves were insufficient to meet the future obligations"); Ex. 5, 8/11/2010, Wanlass Tr. at 150 (Wanlass learned in late 2008 that former Tronox Chief Accounting Officer David Klvac had told former outside counsel "[t]hat Tronox tends to put their head in the sand when it comes to recognizing environmental liability"); Ex. 7, 5/24/2011, Klvac Tr. at 20-21 (confirming that he told Tronox's outside counsel that "Tronox stuck its head in the sand" with respect to its environmental liabilities)) Therefore, apart from assessing the environmental liabilities that were "known or knowable" as of November 2005, Tronox asked Dr. Ram to analyze documents and information related to contingent liability reserves that Tronox had set for ten environmental sites¹¹ and their service station portfolio in early 2009 so

refers to opinion testimony that lacks any connection to existing data. *See In re Med Diversified*, 334 B.R. at 102 ("nothing in either *Daubert* or the Federal Rules of Evidence requires a . . . court to admit opinion evidence which is connected to existing data only by the *ipse dixit* of the expert") (citing *General Electric v. Joiner*, 522 U.S. 136, 146 (1997)). Of course, Dr. Ram's testimony as to the actual methodology he employed is a matter of fact—not opinion.

¹¹ In 2009, Tronox also asked Dr. Ram to provide a preliminary analysis of the Manville liability. Because it involved legal issues, however, Dr. Ram analyzed Manville separately and only provided preliminary opinions regarding the history of expenditures at the site. (Ex. 8, 10/5/2010, Ram Tr. at 160-61)

Mr. Wanlass could determine if he should sign the 2008 10-K.¹² (Ex. 5, 8/11/2010, Wanlass Tr. at 146-47, 189-90)

Dr. Ram's 2009 analysis does not provide a basis to exclude any of his testimony. He and his team understood that the 2005 and 2009 analyses were separate projects under separate standards that were based on separate information. In fact, his work in 2009 did not include the vast majority of sites for which he later assigned costs based on information that was known or knowable as of 2005. Dr. Ram only analyzed ten of the 148 non-service station sites in 2009 that he included in his 2005 analysis. (Ex. 9, 10/05/10 Ram Ex. 8; Ex. 2, 6/24/2011, Ram Rpt. ES at 8) For his 2005 analysis, Dr. Ram relied only on information known or knowable as of 2005 and not on his separate 2009 analysis. (Ex. 3, 2/8/2012, Ram Tr. at 80, 163) In any event, Defendants' own cost estimates for these sites confirm that Dr. Ram's analysis is not infected by hindsight. Defendants' aggregate 2005 cost estimate for the sites included in Dr. Ram's 2009 analysis is *within two to five percent* of Dr. Ram's 2005 cost estimate for these sites. Dr. Ram's 2005 cost estimate for the ten sites and service station portfolio that were included in his 2009 analysis is a range of \$328.7 million to \$340 million. When adjusted for comparative purposes, Defendants' estimate for these same ten sites and service station portfolio is \$323.3 million—*only \$5.4 million to \$16.9 million (or two to five percent) lower than Dr. Ram's estimate*. Thus, Defendants' own cost estimates belie any claim that hindsight from Dr. Ram's work in 2009 has impacted his costs estimates as of 2005 and confirm that Dr. Ram applied the correct standard.¹³

¹² Based on his review of Tronox records and interviews with Tronox's environmental personnel, Dr. Ram concluded that the existing reserves of \$65.2 million for these ten sites and the service station portfolio were understated by at least \$68.5 million (or more than 100 percent) as of year end 2008. (Ex. 9, 10/5/10 Ram Ex. 8) Tronox subsequently retained an accounting consultant to prepare a restatement of the reserves, which was then audited by Grant Thornton. The restatement concluded that Tronox's environmental reserves of \$197.3 were understated by \$303.2 million as of December 31, 2007. (Ex. 10, Riley Ex. 8 at 13, 58)

¹³ Defendants criticize Dr. Ram for not using separate teams for each of these projects, but do not cite any legal, ethical or other requirement for "walling off" team members as they suggest. Dr. Ram's attempts to be efficient

Defendants' other criticisms are equally baseless. For example, Defendants claim that Dr. Ram "cited post-IPO documents hundreds of times" in his expert report. (Mot. at 8) With the exception of the two sites and one metric discussed above, however, Dr. Ram based his cost estimates solely on information that was known or knowable at the time of the IPO. The other post-IPO documents were included to corroborate cost estimates that were based on information that was known or knowable at the time of the IPO or as background to complete the site chronology.¹⁴ (Ex. 4, 6/24, 2011, Ram Rbtl. Rpt. at 62-66) This approach is entirely consistent with the law—even conservative. *In re Commercial Fin. Servs.*, 350 B.R. at 542 ("actual post-transfer events may *confirm* a value that was determined by information known or knowable at the time of the transfer."); *In re RML*, 2 F.3d at 155 n.7 (appropriate to use post-transfer information to "buttress" evidence at transfer date); *W.R. Grace*, 281 B.R. at 856 (no limitation on the information that can be used for a balance sheet solvency test).

Contrary to Defendants' assertions (Mot. at 9), Dr. Ram also properly defined the term "knowable." He determined that information was "knowable" for purposes of his analysis if someone, such as a Kerr-McGee project manager, in 2005 could have learned the information if they had bothered to look with the use of equipment that was readily available to someone in that position. (Ex. 3, 2/8/2012, Ram Tr. at 82, 291) For example, Dr. Ram concluded that dried creosote (which includes several probable human carcinogens) observed on the ground during

on a massive project for a recently-filed debtor should be lauded. While Defendants have spent well in excess of \$100 million defending this action, Plaintiff does not have a similar war chest at its disposal. (*See* 11/2/10 Defs.' Resp. to the Debtors' Obj. to Their Am. Proofs of Claim [Case No. 09-10156 (ALG), Dkt. 2363] at 6 n.9 (Defendants' liquidated defense costs as of November 2010 were approximately \$67.5 million); 10/11/10 Tronox Obj. to Defs.' Proofs of Claim [Case No. 09-10156 (ALG), Dkt. 2235] Ex. B at 3 (reflecting Defendants' estimate of \$106.7 million for total amount spent in adversary proceeding))

¹⁴ In addition, there were several other instances where Dr. Ram initially relied upon post-IPO documents but later confirmed that this information was available in pre-IPO documents. (*See, e.g.*, Ex. 4, 6/24/2011, Ram Rbtl. Rpt. at 68-73) While Defendants claim this is "immaterial," they do not dispute the same information from the post-IPO documents was available in the pre-IPO documents. (*See* Mot. at 8)

site visits to three former Kerr-McGee wood treating sites was “knowable” because operations at those sites that created that contamination had ceased before 2005. (Ex. 2, 6/24/2011, Ram Rpt. Ch. 4.6.4 at 3, 13-14; Ch. 4.6.16 at 6; Ch. 4.6.6 at 16-17; Ex. 3, Ram Tr. at 83-84) He also determined that the characteristics of the radioactive waste rock piles that Kerr-McGee left behind on the Navajo Nation when it stopped mining uranium there in the early 1960s were knowable because a Kerr-McGee project manager “very easily [could] just walk over with a gamma meter.” (Ex. 3, 2/8/2012, Ram Tr. at 84-85)

Of course, Defendants disagree. But it is Defendants’ “head in the sand” approach to what was “knowable” in November 2005 that is inconsistent with the law. For example, their expert claims the dried creosote on the ground was not “knowable” because there is no proof it was actually there in November 2005 (even though wood treating operations had ceased at the sites prior to that date). (Ex. 1, 2/16/2012, Shifrin Tr. at 113) He also disagrees that gamma readings at the Navajo uranium mines were knowable as of 2005 for waste rock piles that had been present for decades since Kerr-McGee left. (Ex. 11, 11/3/2011, Shifrin Rpt. at 5854 (“That is not what the term ‘knowable’ means.”))

As the *W.R. Grace* court recognized, where parties like Kerr-McGee knew they had a “serious and open-ended [environmental] liability problem for years before the transaction at issue,” those transactions “must take the reality of the companies’ existing liability and the inherent difficulty in defining that liability’s scope into consideration.” 281 B.R. at 868-69 (“mere errors in the debtor’s calculation of its solvency are to be corrected to reflect the evidence”). Kerr-McGee was well aware, for example, of the uranium contamination on the Navajo Nation before the Tronox IPO. In May 2003, Kerr-McGee’s head of environmental, George Christiansen, was aware that EPA was gathering information that “could easily be used

to identify potentially responsible parties for cleanup costs” on the Navajo Nation. (Ex. 12, Christiansen Ex. 21) In 2004, Christiansen even sent a Kerr-McGee employee to quietly attend a conference on abandoned uranium mines to “see if Kerr-McGee’s involvement came up.” (Ex. 13, 9/28/2010, Logan Tr. at 95-96) Christiansen also conceded he was concerned about potential Kerr-McGee liability on the Navajo Nation prior to the IPO. (Ex. 14, 6/2/2011, Christiansen Tr. at 343 (“Q. Did you have any concern about Kerr-McGee’s potential liability for its uranium activity? A. Well, I think we had learned at Riley Pass that there was—that [EPA or other agencies] may come to us on some of this, whether it was, again, right or wrong, it could be debated, but at least there was a potential for that.”); *see also* Ex. 13, 9/28/2010, Logan Tr. at 96-97) Despite these concerns, Christiansen admitted that Kerr-McGee never investigated the scope of its potential liability on the Navajo Nation: “We would not have had a reason to conduct an investigation because no one had come to us asking for such.” (Ex. 14, 6/2/2011, Christiansen Tr. at 340)

The fact that Kerr-McGee refused to investigate known liabilities on the Navajo Nation (and many other sites) does not render information about these and other liabilities “unknowable.” Nor does it provide a basis to exclude Dr. Ram’s testimony. In this regard, Defendants’ reliance on the “oil discovery” hypothetical in *First National Bank of Kenosha* is wholly inapposite. (Mot. at 5) Unlike Kerr-McGee’s knowledge regarding the uranium liabilities on the Navajo Nation, the court specified that the oil discovered in the hypothetical was “oil that no one had suspected existed,” and therefore a fact that a “hypothetical willing buyer could not have known.” 763 F.2d at 894. The court recognized that all facts that a hypothetical buyer and seller “could reasonably have been expected to know” as of the valuation date were properly considered for purposes of the valuation at issue. *Id.* at 893-94.

C. Most Likely Value Is The Preferred Method In This Case.

Defendants also criticize Dr. Ram because he did not use an expected value analysis like Defendants' experts did. But the fact that Dr. Ram did not use the same methodology as Defendants' expert does not render his analysis unreliable. *Fleischman v. Albany Med. Ctr.*, 728 F. Supp. 2d 130, 147 (N.D.N.Y. 2010) ("The fact that Defendants dispute [the expert's] methodology does not render the methodology unreliable. Experts are entitled to differing opinions as to the validity of the methodology, so long as the challenged methodology is grounded in reliable scientific principles and facts.").

Dr. Ram used a most likely value analysis, which reflects the cost of the "technical and regulatory scenario that is most likely to occur." (ASTM E 2137-01 § 5.4.2¹⁵) As Dr. Ram will explain at trial, he grounded his most likely value analysis in specific cost estimates of work to be performed as of November 2005 based on vendor quotes or consultant estimates, detailed cost estimates developed using Remedial Action Cost Engineering and Requirements (RACER) software, or other technical environmental analyses. (Ex. 2, 6/24/2011, Ram Rpt. Ch. 2.0 at 5) He then applied industry-accepted contingencies to these cost estimates to account for uncertainties associated with the phase of anticipated environmental response actions developed for each site before allocating the estimate among PRPs and adjusting for present value.¹⁶ (*Id.* at 34-38)

¹⁵ ASTM is the industry-standard guidance for estimating future environmental costs. The relevant guidance, ASTM E 2137-01: *Standard Guide for Estimating Monetary Costs and Liabilities for Environmental Matters*, is attached as Ex. B to Defendants' declaration in support of the motion. [Dkt. No. 325]

¹⁶ Defendants' suggestion that Dr. Ram misapplied the most likely value analysis is bizarre. As Dr. Ram testified at deposition, he determined the most likely value based on "the project documents as I read them indicate[d] that this is the path of the most likely outcome, most likely scenario based on the project documents." (Ex. 3, 2/8/2012, Ram Tr. at 221) This is entirely consistent with ASTM. (*See, e.g.*, § 5.4.2 ("This MLV captures the scenario believed to be most likely to occur (for example, a stated preferred remedy). Typically, the estimator exercises a priori judgments (based on experience) about the ranking of likely outcomes.... [T]he MLV is typically not the mid-point between the high and low cost estimates. The MLV should represent the technical and regulatory scenario most likely to occur.")) As Dr. Ram's reports also make clear and he will explain at

Both most likely value and expected value are accepted methodologies for cost estimating under the relevant industry guidance (ASTM). (*See* ASTM E 2137-01 § 5.2) Contrary to Defendants' suggestion that expected value is always the "gold standard," ASTM recognizes that "it is not necessarily true that the 'best' estimate for a given set of circumstances will always be the expected value."¹⁷ (*Id.* § 5.2.2) ASTM provides that a cost estimator "should take into account the number of events and *quality of the information available or obtainable* when selecting the cost and liability estimation approach to be used." (*Id.* § 5.2.3 (emphasis added))

Dr. Ram did not perform an expected value analysis because the information available did not allow him to assign reliable and meaningful probabilities and cost estimates for alternatives other than the most likely scenario. (Ex. 2, 6/24/2011, Ram Rpt. Ch. 2.0 at 6-7) The information also did not allow him to base outcome probabilities on "statistical data drawn from comparable events" as required by ASTM when practicable. (ASTM E 2137-01 § 5.4.1.3) Defendants claim that Dr. Ram's explanation is internally inconsistent. (Mot. at 13 ("[I]f the data were so poor that he could not assign probabilities to outcomes, he also could not rationally determine which single outcome is most likely and thereby disregard all other outcomes."))

trial, he did consider other scenarios and determined that the likelihood of the selected outcomes (representing the MLV) was significantly greater than any other scenario, grouping or cluster of outcomes as required by § 5.4.2 of ASTM. Where he could not make this determination, he used a range of values "to cover costs from a low cost estimate to a high cost estimate, based on reasonable assumptions." (*Id.* § 5.4.3)

¹⁷ Defendants are also wrong that "all experts" in the *Asarco* bankruptcy used expected value. For example, an expert on behalf of the U.S. Department of Justice estimated future costs of \$2.564 billion at the Coeur d' Alene Superfund Site using a most likely value analysis. (Ex. 15, Proffer of Direct Testimony of Paul R. Ammann, *In re Asarco, LLC*, Case No. 05-21207 [Dkt. No. 5996-4] ¶ 21 (Bankr. S.D. Tex. Oct. 2, 2007)) Indeed, Mr. Ammann criticized one of Defendants' experts here, Richard Lane White, for using a probabilistic approach that "introduced numerous unsupported, low-cost alternatives and assigned high probabilities to them, biasing the expected value." (*Id.* ¶ 19) Even though the government used a most likely value approach at the Coeur d' Alene and certain other sites in *Asarco*, Mr. White testified at deposition here: "Everybody used probabilistic cost analysis [in *Asarco*]. This whole discussion just never existed because the witness, the experts for the United States protection agency and the DOJ used probabilistic cost analysis." (Ex. 16, 2/17/2012, White Tr. at 145)

Defendants have it backwards. An expected value analysis requires the cost estimator to assign numerous probabilities and cost estimates for unlikely alternatives at each site, which Dr. Ram concluded could not be done with any sort of precision given available information. This is consistent with ASTM, which recognizes that more information is necessary to perform a proper expected value analysis than most likely value or other approved methodologies. (ASTM E 2137-01 § 5.2.2)

The arbitrary and speculative nature of Defendants' expert analysis confirms that Dr. Ram made the right choice. Although packaged in hundreds of pages of seemingly complex decision trees, Defendants' expected value analysis is simply a roll up of hundreds of "conceptual" probabilities (*e.g.*, 10% = "unlikely but possible"; 30% = "possible," etc.) that are based on purely subjective judgments. (Ex. 1, 2/16/2012, Shifrin Tr. at 226-28, 245-47, 250) Defendants' "conceptual" probability approach is not set forth in ASTM or any peer review journal. (*Id.* at 229) While Defendants are quick to criticize Dr. Ram for using his professional judgment (Mot. at 2), their expert concedes his approach also "relies on our *professional judgment* (*e.g.*, converting a qualitative concept of "more likely than not" to a quantitative probability of 70%)...." (Ex. 17, Shifrin Surrebuttal Rpt. at 007 (emphasis added); Ex. 1, 2/16/2012, Shifrin Tr. at 225, 249) Indeed, many of Defendants' probability assignments are nothing more than a "most likely value" analysis, with any remaining probability percentage after assigning a probability to the "most likely value" divided equally among remaining outcomes that Defendants decide to include in their decision trees. (Ex. 11, 11/3/2011, Shifrin Rpt. at 7455)

Under the guise of a purported "probabilistic" analysis, Defendants often interject unrealistic treatment alternatives that serve only to lower the overall cost estimate. ASTM

specifically warns against this practice: “The estimator should be careful to include realistic outcomes with statistically significant probabilities to avoid shifting the expected value through the addition of extreme outcomes with insignificant probabilities of occurrence.” (ASTM E 2137-01 § 5.4.1.2) For example, Defendants included a 10% probability that the Riley Pass uranium site would only require institutional controls (the lowest cost alternative for the site) *even though regulators already had rejected that approach* by November 2005. (Ex. 11, 11/3/2011, Shifrin Rpt. at 1827-38; Ex. 4, 12/17/2011, Ram Rbtl. Rpt. at 294) Similarly, Defendants assumed at the majority of the wood treating sites that only 10% of excavated materials would require disposal in hazardous waste facilities (which is significantly more expensive than non-hazardous waste disposal facilities) *even though historically Kerr-McGee had sent at least 33% of excavated material to hazardous waste facilities*. Also, for three wood treating sites, Defendants assigned significant probabilities to a lower cost remedy (*in situ* stabilization) that historically had never before been implemented at any of the 18 other Kerr-McGee wood treating sites. (Ex. 11, 11/3/2011, Shifrin Rpt. at 4895 (Rome), 5245 (Toledo), 5351 (Wilmington))

The arbitrary nature of Defendants’ approach is highlighted by their analysis of the Navajo uranium mines. After criticizing Dr. Ram for his use of site specific information, Defendants anchor their analysis in a 1993 Mineral Policy Center study of 557,600 hard rock mines in the United States. (*Id.* at 5876) Of course, this is not a study of mines on the Navajo Nation or even uranium mines in general. Even if the study included all 4,000 uranium mines with documented production in the U.S., they would still make up less than 1% of the total hard rock mines (which include a wide variety of non-uranium mines, such as gold, silver, iron, and copper mines) in the survey. (Ex. 4, 12/17/2011, Ram Rbtl. Rpt. at 400) Undeterred,

Defendants conclude based on data from this single, wholly inapposite study that 92.5% of the Kerr-McGee mines on the Navajo Nation will not “cause environmental problems.” And only 3.9% of the few mines that actually survive that initial cut will require response costs in excess of \$3 million. (Ex. 11, 11/3/2011, Shifrin Rpt. at 5876) Defendants’ expert further reduces the resulting amount by a PRP allocation and then assigns 33% of the remaining costs to the United States simply because Defendants’ lawyers told him to do it. (Ex. 16., 2/17/2012, White Tr. at 116-17) The result is a bargain-basement cost estimate of \$8.6 million for all 41 Kerr-McGee former uranium mines and a transfer station that is completely divorced from reality.¹⁸

Finally, Defendants’ reliance on *Lippe v. Bairnco Corp.*, 288 B.R. 678 (S.D.N.Y. 2003), and *In re Med Diversified*, 334 B.R. 89 (Bankr. E.D.N.Y. 2005) is misplaced. In both cases, courts excluded valuation testimony as unreliable because the expert witness failed to perform a discounted cash flow analysis in valuing businesses, which the courts recognized as the most reliable method for business valuation. *See Lippe*, 288 B.R. at 689; *In re Med Diversified*, 334 B.R. at 98-99. By contrast, ASTM does not endorse the expected value methodology as the “most reliable” methodology for assigning costs to environmental liabilities, but rather recognizes it is appropriate—and, in cases such as this, preferable—to use the most likely value methodology used by Dr. Ram. Moreover, in both of Defendants’ cases, the courts excluded the experts’ testimony because they had no basis for rejecting the discounted cash flow methodology under the circumstances. *See In re Med Diversified* 334 B.R. at 99; *Lippe*, 288 B.R. at 689. In contrast, Dr. Ram has explained why expected value is not the appropriate methodology for

¹⁸ Outside of this litigation, there is little debate about the seriousness of the problems caused by radioactive mine waste on the Navajo Nation and the massive costs required to clean it up. As evidenced by last week’s story in *The New York Times*, it is frequently a topic in the national news. *See* Ex. 18, Leslie MacMillian, *Uranium Mines Dot Navajo Land, Neglected & Still Perilous*, THE NEW YORK TIMES (Mar. 31, 2012).

estimating costs regarding Tronox's environmental liabilities. There is simply no basis to exclude his testimony.¹⁹

II. Defendants' Request That Plaintiffs Be Precluded From Referring To The Total Number Of Environmental Sites Dumped On Tronox Is Baseless.

Having sought to bar his opinions regarding the 372 sites to which he assigned costs, Defendants' motion *in limine* drops the other shoe: they also would like the Court to bar any references to the other 2,400 sites that Kerr-McGee dumped on Tronox and its creditors. Motions *in limine*, however, are not a tool to rewrite historical facts.

Dr. Ram identified more than 2,700 sites that Old Kerr-McGee or its affiliates or predecessors owned, operated, and/or used for waste disposal. (Ex. 2, 6/24/2011, Ram Rpt. ES at 1-2) As set forth in his expert report and explained at his deposition, Dr. Ram created this list by reviewing numerous Kerr-McGee internal documents that identified the linkage between Kerr-McGee and the site. He eliminated sites where he later confirmed that Tronox would not have liability (through, for example, a release in a purchase and sale agreement). (*See, e.g., Id.* Ch. 5.0 at 1; Ch. 5.2 at 6; Ch. 5.4 at 2) For example, an August 5, 2005 internal Kerr-McGee document titled "list of additional sites formerly owned, leased, or operated by KMC Chemical LLC or predecessors" included several hundred additional agricultural chemical sites that were not included on schedules in the Master Separation Agreement. (*Id.* Ch. 5.2 at 6) Similarly, a draft Purchase and Sale Agreement between Apollo and Kerr-McGee identified hundreds of additional sites where Kerr-McGee disclosed that "a release of Hazardous Substances requiring reporting, investigation, assessment, cleanup, remediation, or other type of response action . . .

¹⁹ Defendants wrongly criticize Dr. Ram's discounting. (Mot. at 14-17) As he explained in his report and at deposition, Dr. Ram used a discount rate and formula provided by Professor Newton. (Ex. 2, 6/24/2011, Ram Rpt. Ch. 3.0 at 3; Ex. 3, 2/8/2012, Ram Tr. at 327) Professor Newton also reviewed Dr. Ram's analysis to ensure that the discount rate was correctly applied. (Ram Tr. at 327) Defendants' other criticisms do not even rise to the level of nit picking. That Defendants are even raising such minor issues in a *Daubert* motion signals their underlying problem: Tronox was deeply insolvent at separation. And they know it.

may have occurred.” (*Id.* Ch. 5.2 at 6 n.8) Based on these and other similar documents, Dr. Ram identified an additional 263 agricultural chemical sites, 671 mining sites, 72 waste disposal facilities, 25 pipeline sites, and 45 “other” domestic sites. (*Id.* ES at 11-12, 5.0 at 1, Ch. 5.2 at 6, Ch. 5.4 at 2, Ch. 5.5.2 at 1, Ch. 5.5.4 at 1)

Dr. Ram specifically assigned costs to 372 sites. He also evaluated costs for a portfolio of 1,279 non-owned service stations for which Kerr-McGee did not have reserves at the time of the IPO based on, among other factors, the likelihood that there had been documented releases at these sites. (Ex. 2, 6/24/2011, Ram Rpt. Ch. 5.5.3, p. 10) Even after counting all of the sites in the portfolio, Dr. Ram still did not assign costs to approximately 1,000 sites. (*Id.* ES at 12-13) Defendants do not dispute a Kerr-McGee entity’s connection to any of the sites to which Dr. Ram did not assign costs. (*See* Ex. 1, 2/16/2012, Shifrin Tr. at 45)

Plaintiff does not dispute that costs for these 1,000 sites are not included in its solvency analysis. Plaintiff also does not dispute that Tronox likely would not have faced liability at some of these 1,000 sites. Defendants are entitled to develop these simple and uncontested points through cross examination. But this certainly does not mean that Tronox would never have been called upon to clean up *any* of these 1,000 sites for which Dr. Ram did not assign costs—especially because they were used in “dirty” businesses such as uranium and other mining, agricultural chemical, pipelines, and waste disposal. In light of Tronox’s undisputed connection to these sites, Dr. Ram’s testimony that his analysis of contingent environmental liabilities is conservative because it does not include *any costs* for these 1,000 sites is not “speculation;” it is a fact. Tronox could only face additional liability from these 1,000 sites. They could never reduce Tronox’s total liability. Accordingly, because Dr. Ram did not estimate Tronox’s liability at approximately 1,000 sites, his approach in this respect is inherently conservative. Indeed,

Defendants have had opportunities to take back these and other sites, or assume responsibility for them. Their steadfast refusal to do so speaks volumes.

Defendants also ask the Court to deem admitted certain requests for admission (“RFAs”) to which Plaintiff objected on the grounds that the requests were “overly broad and unduly burdensome” to the extent they sought “information concerning sites which Plaintiffs’ environmental expert, Dr. Ram, has not assigned specific costs or sites that Dr. Ram used to assign specific costs to other sites.” (Mot. at 4, 8) Defendants’ requested relief is improper and, in any event, Plaintiff’s objection is justified.

For starters, even if Plaintiff’s objection was improper (which it is not), Defendants would not be entitled to have their RFAs deemed admitted. In relevant part, Federal Rule of Civil Procedure 36(a)(6), under which Defendants move, provides:

The requesting party may move to determine the sufficiency of an answer or objection [to an RFA]. Unless the court finds an objection justified, it must order that an answer be served. On finding that an answer does not comply with this rule, the court may order either that the matter is admitted or that an amended answer be served.

Fed. R. Civ. P. 36(a)(6). Here, Defendants challenge one of Plaintiff’s objections to their RFAs—not Plaintiff’s answers. Thus, if the Court finds that Plaintiff’s objection to Defendants’ RFAs is not justified, the appropriate relief is an order that Plaintiff answer Defendants’ RFAs with respect to sites for which Dr. Ram did not assign specific costs, not an order that Defendants’ RFAs are admitted.

In any event, Plaintiff was justified in objecting to Defendants’ RFAs as overly broad and unduly burdensome. “Courts may limit discovery on the ground that ‘the burden or expense of the proposed discovery outweighs its likely benefit, considering the needs of the case, the amount in controversy, the parties’ resources, the importance of the issues at stake in the action, and the importance of the discovery in resolving the issues.’” *Sahu v. Union Carbide Corp.*, 262

F.R.D. 308, 317 (S.D.N.Y. 2009) (quoting Fed. R. Civ. P. 26(b)(2)(C)(iii)) (finding that requests for admission were unduly burdensome).

Here, Plaintiff's objection should be sustained because forcing Plaintiff to investigate and answer Defendants' RFAs with respect to hundreds of sites that are not included in Plaintiff's solvency analysis outweighs any purported benefit to Defendants of obtaining answers. This is especially true because the same information can be obtained—at no expense—through a few questions at trial. For example, Defendants' RFA No. 3 asks Plaintiff to admit that “as of November 28, 2005, neither Kerr-McGee Corporation and/or its subsidiaries and affiliates, nor Tronox and/or its subsidiaries and affiliates, had received any written notice from the [U.S. EPA], pursuant to CERCLA . . . for the sites listed in Exhibit 3,”²⁰ which exhibit lists hundreds of sites that are not included in Plaintiff's solvency analysis. There is simply no justification for the time and expense that Plaintiff would incur in investigating this and similar RFAs with respect to hundreds of sites that are not part of Tronox's solvency analysis. Defendants can simply ask Dr. Ram if he knows of any CERCLA notices that Kerr-McGee or Tronox received with respect to sites for which he did not assign costs. Accordingly, Plaintiff's objection to certain of Defendants' RFAs as overly broad and unduly burdensome should be sustained.²¹

²⁰ Similarly, RFA No. 4 asks for the same admission except with respect to the time period after November 28, 2005. The other RFAs to which Plaintiff objected that would require Plaintiff to investigate hundreds of sites not included in Plaintiff's solvency analysis include RFA No. 5 (concerning Kerr-McGee or Tronox's receipt of “written claims or assessments”), RFA No. 6 (concerning response costs incurred by the United States), RFA Nos. 7-8 (concerning authorization of funding by the U.S. EPA), RFA No. 9 (concerning whether Old Kerr-McGee held title to sites), and RFA No 10 (concerning whether Old Kerr-McGee operated sites).

²¹ *Diederich v. Dep't of the Army*, 132 F.R.D. 614 (S.D.N.Y. 1990), cited by Defendants, does not advance their motion. Plaintiff does not object to Defendants' RFAs because they are “extensive and likely cover a large percentage of the issues in the case,” 132 F.R.D. at 616, but rather because investigating and answering them with respect to hundreds of sites not included in Plaintiff's solvency analysis would be unduly burdensome given that the same information can be obtained without burden or expense. *Wiwa v. Dutch Petroleum Co.*, 2009 WL 1457142 (S.D.N.Y. 2009) is also inapposite, as it concerns the sufficiency of answers to RFAs, rather than whether an objection is justified.

CONCLUSION

It would certainly “simplify” trials if relevant and highly probative evidence could be excluded. But the law safeguards the admissibility of such evidence, not its exclusion. Plaintiff believes it would have “simplified” the lives of thousands of involuntary environmental and tort claimants if Kerr-McGee had not dumped these liabilities on Tronox with insufficient assets to service them. That is why there needs to be a trial—where each side can submit relevant evidence, subject it to the crucible of cross examination, and receive the judgment of an impartial court. As set forth above, Defendants’ motions border on frivolous and should be summarily denied.

Dated: April 6, 2012

Respectfully submitted,

/s/ David J. Zott, P.C.

David J. Zott, P.C. (*admitted pro hac vice*)

Jeffrey J. Zeiger (*admitted pro hac vice*)

KIRKLAND & ELLIS LLP

300 North LaSalle Street

Chicago, Illinois 60654

Telephone: (312) 862-2000

Facsimile: (312) 862-2200

Counsel for the Anadarko Litigation Trust

CERTIFICATE OF SERVICE

I, Jeffrey J. Zeiger, hereby certify, under penalty of perjury pursuant to 28 U.S.C. § 1746, that on this 6th day of April 2012, I caused a true and correct copy of the foregoing Plaintiff's Opposition to Defendants' Motion to Exclude the Testimony of Dr. Neil Ram under Federal Rule of Evidence 702, Motion *in Limine*, and Motion for Relief under FRCP 36(a)(6) to be served upon the following:

Via U.S. Mail and Electronic Mail

Melanie Gray
Jason W. Billeck
Weil, Gotshal & Manges LLP
700 Louisiana, Suite 1600
Houston, Texas 77002

Counsel for Defendants

Via Electronic Mail

Robert William Yalen
Assistant United States Attorney
86 Chambers Street
New York, New York 10007

*Counsel for the United States of
America*

/s/ Jeffrey J. Zeiger